Measurements in millimetres.-Total length 24 ; length of carapace 10 , of palp 27 , of first leg 41 , second 37 , third 35 , fourth 44.

## Loc. El Kubar.

Up to the present time the genus Monocentropus was represented by a single species, M. Balfouri, Poc., known only from Sokotra. The discovery of the genus in Arabia is most interesting. The Arabian species is much smaller than the Sokotran, has uniformly coloured legs and exceptionally long palpi.
XXV.-Descriptions of Four new Arachnida of the Orders Pedipalpi, Solifuga, and Araneæ. By R. I. Pocock.

## 1. A new Species of Pedipalp of the Genus Heterophrynus.

## Genus Heterophrynus, Poc.

Since writing the descriptions of the tro new species of Heterophrynus which appeared in the 'Annals' for March of last year, a fresh consignment of material from S. America has brought two additional specimens of $H$. armiger, one from Butim in N. Ecuador, the other from the River Durango, N.W. Ecuador. Both of these substantiate the constancy of the characters upon which the species was based, one of the specimens being peculiarly interesting in this connection on account of its immaturity. In addition to these, another well-marked species of the genus was received from Peru. This I propose to diagnose and describe as follows:-

## Heterophrynus elaphus, sp. n.

Colour of carapace and chelæ deep reddish brown; legs paler yellowish red, without annulations.

Carapace, chelo, and femora less coarsely granular, outer and upper side of " hand "smooth, except for a few granules at its proximal end on the outer side; chelæ short, shorter than in any known species except $H$. alces, the femur much shorter than the width of the carapace, the tibia as long as its width, femora of legs about twice the width. All the spines on the cheloe long; femur armed with five spines as in H. cervinus, armiger, and alces, and with four below as in cervinus, and progressively decreasing in length from the
proximal to the distal end of the segment, but owing to the shortness of the femur the distal spine lies near its distal end, not close to its middle as in $H$. cervinus; the length of the proximal spine, the longest of the series, is equal to half the length of the upperside of the femur ; tibia armed with six spines above and five below, as in H. cervinus, H. alces, and H. armiger, and, as in armiger and alces, the two distal spines on the upperside are shortish, slender, and subequal in thickness and strength (in cervinus the ultimate is much stronger than the penultimate) ; on the underside the second and third spines from the distal end are much the longest of the series and equal ; in $H$. cervinus the second spine from the distal end is shorter and thinner than the ultimate and much shorter than the third or antepenultimate. In alces and armiger the row of spines is practically the same as in H. elaphus, except for the presence of an additional spine between those that arc the third from the proximal and the second from the distal end ; the first long spine on the upperside of the tibia is about its own length from the proximal end; the tibia weakly bowed, about four times as long as high, and rather less than twice the length of the hand. Hand spined as in H. armiger, the inferior proximal spine smaller than in II. cervinus; much smoother than in the latter.

Measurements in millimetres.-Total length 32 ; width of carapace 15 , its median length 10.5 ; length of upperside of femur of chela 11 , of tibia 15, femur of second leg 32.

Loc. Marcapata Valley, E. Peru.
In the spine-armature of the chelæ this species is intermediate between $H$.cervinus and $H$. armiger. The chelæ, however, are much shorter and less coarsely granular than in either of these species.

The only other species of this genus previously recorded from Peru is H. gorgo of Wood (Tr. Am. Phil. Soc. xiii. p. 440, pl. xxiv. fig. 1, 1869). This species is unknown to me, but judging from the figure and description, neither of which is good, it has the chelæ more granular and much longer, the femur exceeding the width of the carapace by one fourth of its length, the tibia exceeding it by one third of its length. The spines, moreover, are much shorter ; on the lower side of the femur there are five, of which the third from the proximal end is longer than the second; there are seven spines on the upperside of the tibia, two preceding the first long spine. Width of carapace 16 millim.; length of femur of chela 22 , of tibia 25.

All these characteristics point to close relationship between Ann. \& Mag. N. Hist. Scr. 7. Vol. xi.
gorgo and the common lower Amazonian species, H. longicornis, Butler-a fact which suggests that the locality on the label was misread "Peru" for" Para."

## 2. A new European Species of Solifuge ex.

Genus Giuvia, C. K. Gluvia Chapman, sp.n.

ठ. -Colour. Integument uniformly deep black on the head, mandibles (with exception of the jaws, which are paler), pali, legs, and dorsal and ventral surfaces of the abdomenthe genital segment, malleoli, and coxa of the appendages alone being pale.


Right mandible of Ciluria Chapman; inner side.
The whole of the integument covered with a thickish coating of stiff, short, erect hairs of a dirty yellow colour, which relieves the blackness of the integument beneath.

Dentition of mandible apparently as in $\boldsymbol{r}$. dorsalis, although the intermediate tort of the under jaw lies far back behind the anterior large tooth, and not midway between the two large teeth as represented in Krapplin's drawing ; the upper jaw with its dorsal edge not evenly arched from base to point, hut abruptly narrowed distal from the flagellu:n (see figure).

Flagellum 'see figure) with its dorsal and ventral edges overfolded; the lower edge with a deep and acutely angular excision, the borders of the excision and of the lower edge distal from it pectinate; the distal fourth of the upper edge also strongly pectinate, the pectinations interdigitating with those of the corresponding area of the lower edge; the swivel joint of the flagellum remote from the rounded extremity of the flagellum, and lying about one fourth of the length of this organ from that end of it. In G. dorsalis, according to Kraepelin, only the dorsal border of the flagellum is overfolled, the ventral border is strongly rounded in its proximal half and abruptly narrowed distally, the constriction being rectangular in form ;
the margin, moreover, appears to be without the pectinations which are so conspicuous in G. Chapmani.

Total length 13 millim.
Loc. Spain: Bejar (T. A. Chapman). A single male example.

In addition to the structural features pointed out above, this new species differs from the only other species of the genus known up to the present time in being uniformly black in colour. G. dorsalis, of which Mr. G. C. Champion has collected female examples for the British Museum, in Spain, has the head and mandibles yellow.

## 3. A new Gevus and Species of Trapdoor Spider from Madagascar.

## Genus Forsithula, nov.

Resembling the aberrant genus Diplothele, of which I have seen no examples, in the retention of only a single pair of spinners and other characters. The principal differences between the two may be expressed as follows:-
a. Thoracic forea procurred, semilunar (sec. Simon) ; eves of the anterior line, at least in the female, forming a quadrangle much wider in front than behind, the distance between the anterior median eyes only half as great as that between the anterior laterals; the anterior laterals and posterior laterals forming the angles of a parallel-sided quadrilateral ............. b. Thoracic fovea straight, transverse ; eyes oî anterior line forming a four-sided figure which is almost a square, being only slightly wider in front thau behind: the quadrilateral formed by the anterior and posterior laterals nearly or quite twice as wide behind as in front

Dipluthele.

Forsythula.
The discovery of this new genus is a valuable addition to our knowledge of Trapdoor Spiders, both from a systematic and faunistic standpoint. Its nearest ally, Diplothele, which hitherto held the unique distinction amongst the Barychelidr of being the only genus in which the spinningmammilla of the anterior pair have atrophied, contains two known species-one described from Orissa in India *, the other from Ceylon $\dagger$. The discovery of the nearest ally of this genus in Madagascar is therefere interesting, especially as no kindred form has yet been met with in Africa. Also in view of the probable derivation of most of the fauna of

[^0]the Afro-Mascarene continent from northern sources, it is important to bear in mind that, judging from the arrangement of the eyes, Diplothele is a more primitive type than Forsythula.

Hitherto no genus of Barychelidæ, the almost cosmopolitan family to which the two genera here discussed belong, has been recorded from Madagascar. In fact, the only members of the Mygalomorphre known from this continental island were Encyocrates (a genus of Aviculariidæ relatel to the other genera composing the tropical African, Sokotran, and South Arabian group of the Eumenophorinæ), two genera of Dipluridæ related to S. African forms, one of Ctenizidæ allied to an Australian genus, and some genera of tree trapdoor spiders of the group Migidæ-a group which at the present time is confined to Southern Africa, Madagascar, and Australasia (Tasmania, New Zealand) *, and must be regarded as affording evidence of a former land-connexion between these countries.

## Forsythula Mijori, sp. n.

£ ad.-Colour. Carapace castaneous; legs and sternum yellowish brown; abdomen ashy black, without pattern.

Carapace raised and longitudinally convex in front of the fovea, considerably longer than patella + tibia or than tarsus + protarsus of fourth leg; anterior lateral eyes a little more than their long diameter apart; anterior medians scarcely a diameter apart, and rather more than their diameter from the anterior and posterior laterals; outer edge of the posterior medians about on a level with that of the anterior laterals, the four forming a quadrilateral which is, if anything, slightly wider behind than in front.

Mandille with rastellum composed of straight, not curved, spines; armed below with a single inner row of seven or eight teeth and at most a few denticles towards the basal extremity. Labium unarmed; maxillæ with about nine to eleven small irregularly arranged cusps. Sternal sigilla small, marginal.

Palpi and anterior two pairs of legs unspined, only one or two stout setre on the tibia of the palp beneath apically; tarsi and protarsi of the legs subequal, scopulate, the protarsi scantily so, no clavate spines on the tarsi; third leg with some small short spines on the anterior side of the patella and tibia, protarsus unscopulate, with two or three strong and

* I have recently learnt from Mr. II. R. Hogrg that M. Simon has a genus of this group from Chili.
long spines in front and one behind, also longer and shorter spiniform setæ below, sometimes a spine on the front of the tarsus, which is laterally scopulate beneath; fourth leg with protarsus unscopulate, tarsus weakly scopulate; the former armed with a few short spines beneath apically, and with a small comb of spines on its posterior side beneath.

Measurements in millimetres.-Total length 10 ; length of carapace 5, first leg 9, fourth 11.

Loc. Madagascar : Ambohimitombo, in the Tanala District (C. I. Forsyth Major).

So far as what may be regarded as specific features are concerned, this species differs apparently from the two known species of Diplothele in the uniform dark colouring of the abdomen, the greater height and convexity of the carapace, the shortness and straightness of the teeth of the rastellum, the larger number and irregular arrangement of the maxillary cusps, and especially in the spine-armature of the third and fourth legs.

## 4. A new Tree Trapdoor Spider from Malta.

## Genus Nemesia, Aud. <br> Nemesia arboricola, sp. n.

ㅇ.- Colour. Carapace uniformly fusco-castaneous, mandibles a little darker; legs uniformly yellowish brown; abdomen uniformly fuscous.

Carapace scantily hairy; head high. Eyes of anterior line strongly procurved, anterior edge of medians noticeably behind the posterior edge of the laterals; the two laterals on each side separated by a wide space quite equalling the diameter of the anterior medians, which are a little smaller than the anterior laterals; rastellum confined to inner angle of mandible, consisting of about twelve stout spines. Labium with two or three cusps ; maxilla with five in a single row.

Palp with tarsal scopula divided, the area apically spined ; protarsal scopulæ of first and second legs entire, tarsi apically spined beneath ; tibia of first and second legs armed externally with two, beneath with a row of four external spines and one internal apical, the protarsus with two basal, two apical, and one additional external spine beneath and threc internal; tibia of palp with three pairs of inferior spines; tarsus with a pair of inferior basal spines.

Measurements in millimetres.-Total length 24 ; length of carapace 7, first leg 15, fourth leg 19.

Loc. Malta (Rev. C. Redman, S.J.).

Structurally this species of Nemesia may be distinguished by the wide space separating the lateral eyes and the presence of a few cusps on the labium. In the strong procurvature of the eyes of the anterior line it resembles the Chinese N. sinensis, Poc. (P. Z. S. 1901, p. 212).

The most remarkable feature connected with it, however, is the habit of constructing its dwelling on the trunks of trees instead of burrowing in the ground like the species of the genus hitherto discovered.

The nest much resembles that of Noggridgea and other allied genera. It consists of a subcylindrical silk tube, stiffered and concealed with chips of bark and other debris. The largest measures 52 millim. in length and 15 in width. The shape of the tube, however, is not constant. The door is fairly thick and strong, somewhat bevelled towards the margin, and fits into the orifice when closed. One of the nests contained the carcase of a fly and the leg of a bee belonging, as I learn from Col. Bingham, to a male of the genus Anthophora.
XXVI.-New Species of Oxymycterus, Thrichomys, and Ctenomys from S. America. By Oldfield Thomas.

Oxymycterus quastor, sp. n.
One of the large reddish forms allied to $O$. nasutus, but larger.

Size fairly large. Median dorsal area yellowish tawny, heavily lined with black, gradually passing on sides and rump into deep reddish tawny, and from that again on the belly into rich ochraceous, the hairs slaty grey at their bases. Crown and middle line of face more heavily black-lined than the back. Cheeks like sides. Ears rather large, their fine hairs uniformly blackish. Front of forearms and upper surface of hands brown; inner surface of arm dull greyish buffy, a marked dark brown patch on each wrist. Legs dark rufous; upper surface of feet brown. Tail finely haired, blackish throughout.

Skull long and narrow, markedly narrower in the braincase than in the more northeru O. hispidus. Muzzle long, narrow, parallel-sided; the nasals elongated, broadened, and slightly retroussés. Palatal foramina reaching to the level of the first third of $\mathrm{m}^{1}$; posterior nares level with the back of $m^{9}$.


[^0]:    * D. IFalshi, O. P.-Cambridge, P. Z. S. 1890, p. 621, pl. liii. figz. 1-1 h.
    $\dagger$ I). IInlyi, Simon, Hist. Nat. Araign. i. p. 123 (1892).

